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AN ENUMERATION OF SOME PLANTS—CHIEFLY FROM THE SEMI-TROPICAL REGIONS OF FLORIDA—WHICH ARE EITHER NEW, OR WHICH HAVE NOT HITHERTO BEEN RECORDED AS BELONGING TO THE FLORA OF THE SOUTHERN STATES. BY A. W. CHAPMAN. (Continued from p. 6.)

Lobelia Floridana, n. sp.—Perennial, smooth; stem stout, erect (3-5 feet high), rarely branching; leaves chiefly radical, clustered, spreading, lanceolate, sessile, crenulate, fleshy (6-9 inches long), the upper ones small and very remote; raceme rigid, rather closely many-flowered, the stout appressed pedicels as long as the linear denticulate bracts; calyx-tube enclosing about one-half of the ovoid capsule, strongly 10-ribbed, the lanceolate glandular lobes slightly auriculate at base; corolla (7-9 lines long) of varying shades of blue, villous within and on the lower lip; anthers sparingly hispid.—Margins of ponds and swamps in the pine forests of West Florida. June and July. Near *L. paludosa*, Nutt., with which it has been confounded.

Lobelia Xalapensis, H. B. K. Annual, glabrous; stem slender (1-1½ feet) weak, mostly branched; leaves petiolate, membranaceous, ovate, unequally and mucronately dentate, the upper ones narrower and subsessile; racemes very slender, loosely many-flowered, long peduncled, the pedicels 2-3 times as long as the filiform entire bracts; tube of the calyx broadly obconical, scarcely enlarged at maturity, and enclosing the base of the ovoid capsule, which is longer than the subulate lobes; corolla small, (5 lines), blue; anthers sparsely hispid.—Hammocks near Manatee, South Florida, (Dr. Garber.) Differs from *L. Cliftoniana*, Willd., only in its superior capsule.

Lobelia Feayana, Gray. Annual, glabrous, stems filiform, mostly simple, erect or ascending (4-8 inches high); leaves few, scattered, the lower ones orbicular, crenate (3-4 lines wide), abruptly contracted into a slender petiole; the others narrower, denticulate, subsessile; racemes remotely few (4-8) flowered, the naked, at length, spreading pedicels 2-3 times as long as the linear more or less denticulate bracts, and mostly longer than the small (2 lines long) deep blue corolla; calyx-tube top-shaped, enlarging at maturity, and enclosing about one-half of the ovoid capsule, the lobes subulate; anthers smooth.—Regions of the Upper St. Johns River, Durand (1866), Dr. Garber, and of Peace Creek, Florida, Dr. Feay. There are good reasons for the belief that this is the *L. Cliftoniana*, Mx. (*L. Michauxii*, Nutt.) and that it was erroneously said to have been found "in Virginia."

Campanula Floridana, Watson. Glabrous; stem filiform, angular, simple or sparingly branched at the summit; leaves lanceolate, entire, acute, subsessile, the uppermost ones linear; peduncles terminal erect; lobes of the calyx linear-subulate, bi-dentate, spreading, longer than the spreading 5-parted blue corolla; stigmas recurved.—South Florida, (Dr. Feay). Stem 6-12 inches high. Leaves 8-10 lines long. Corolla 6 lines wide.

Chrysophyllum microphyllum, DC. Branchlets, lower surface of the leaves, pedicels, and calyx densely tomentose, cinnamon-colored; leaves thick, oblong-ovate, entire, acute at each end; pedicels axillary, shorter than the petioles, clustered, the lower ones single; lobes of the calyx oval, one-half as long as the smooth white corolla.—Banks of the Caloosa River, and Miami (Dr. Garber). South Florida. November. A small tree. Leaves 2-4 inches long.

Centunculus tenellus, Duby. Glabrous; stem filiform, simple, erect; leaves roundish, or oval, mucronate, entire, narrowed at the base, subsessile; pedicels single 2-3 times longer than the flowers, shorter than the leaf; calyx 4-5-parted, the subulate lobes as long as the white corolla.—Banks of the Caloosa River, South Florida. October. Stem 4-8 inches high. Leaves 3-4 lines long. Flowers minute.

Hydrantheium Egense, Poepp. ? Floating, sparsely pilose; stem filiform, rooting at the joints, the branches opposite or dichotomous; lower leaves small (2-3 lines long), oblong, very remote, the upper and floating ones larger, crowded, spreading, obovate or roundish, crenate, 5-nerved; peduncles shorter than the leaves; calyx-lobes ovate-lanceolate; lobes of the stigma ovate, spreading; capsule compressed, slightly obcordate; seeds linear pendulous.—New Orleans (Dr. Hale). The specimens are in fruit, and in the absence of flowers I am not certain that the plant is correctly referred.

Dasytoma patula, n. sp. Stem tall (3-4 feet long), slender, curving, pubescent, sparingly and divaricately branched; lower leaves oblong-ovate, pinnately lobed or toothed, serrate, contracted into a broadly winged petiole; the upper ones nearly sessile, lance-oblong, entire; pedicels slender (1-1½ inches long.) spreading or recurved, mostly longer than the lanceolate leafy bracts; calyx-lobes lanceolate, entire, spreading, rather longer than the yellow tube; corolla tubular-campanulate, yellow; filaments at the base and anthers woolly.—Valley of the Coosa River, near Rome, Georgia. September. Parasitic on roots.

Hygrophila lacustris, Nees. Stem erect, simple, obtusely 4-angled, (2-4 feet high); leaves sessile, lanceolate, acute; cymes opposite, sessile, few-flowered; calyx smooth, flowers white.—Muddy banks of the Apalachicola River (Dr. Saurman, 1866.), and of the Mississippi (Dr. Hale, Dr. Riddell).

Hyptis spirata, Poit. Closely pubescent; stem tall, branching, obtusely 4-angular, muricate; leaves ovate, coarsely serrate, acute, long-petioled; cymes opposite, short peduncled, 3-6 flowered, forming axillary and terminal interrupted racemes; calyx, teeth spine-like, spreading; corolla small, purple.—Tampa (Herb. Durand) and streets of Jacksonville, Florida. Stem 2-4 feet high.

Hyptis spicigera, Lam. Stem erect (1-2 feet high), branching, softly pubescent, often muricate, with a villous ring at the joints; leaves ovate, acute, serrate, paler beneath, twice as long as the slender petiole; the upper ones bract-like; whorls crowded into a dense lanceolate or oblong terminal spike; calyx villous at the throat; corolla very small, white.—Fort Meyers, and Miami (Dr. Garber), South Florida.

Satureia ? (*Pycnothymus rigida*, Bart. Villous; stem low (4-6 inches high), assurgent, branching; leaves small (3-4 lines long), lanceolate, rigid, the revolute margins entire; flowers crowded in an oblong terminal head; calyx much shorter than the imbricated bracts, deeply 5-cleft, one-third as long as the tube of the blue spotted corolla.—Low pine barrens, South Florida.

Hedeoma graveolens, Cham., (Gray Bot. Contributions). Stems numerous, shrubby at base, erect (1-1½ feet high), simple or sparingly branched, pubescent; leaves ovate or roundish, cordate, the lowest short-petioled and sparingly serrate; racemes spike like, many-flowered; flowers opposite, single, rarely sessile, the bracts and 2 opposite bractlets oblong, nearly equal; calyx slightly gibbous, the teeth ciliate; corolla purple, spotted at the throat; sterile stamens with abortive anthers; seed ovoid, smooth.—Low pine barrens, West Florida. July.

Sabia occidentalis, Swartz. Stem prostrate, diffusely branched, retrorsely pubescent, the internodes swollen (2-6 feet long); leaves ovate, acute, serrate, abruptly contracted into a short petiole, sparingly hispid; racemes spicate (4-6 inches long), the whorls approximate, mostly 6-flowered, as long as the ovate acuminate bracts; calyx glandular-villous, one-half as long as the small blue corolla; the teeth obtuse; lobes of the style flat, rounded.—Miami, South Florida, (Dr. Garber).

Var. *Garberi*. Racemes more slender, the whorls more scattered (2-6-flowered); corolla larger; teeth of the calyx ending in a long awn-like point. Manatee, South Florida, (Dr. Garber). Near *S. obscura*, Benth., but differs in its rounded stigmas.

Scutellaria montana, n. sp. Perennial? tomentose pubescent; stem simple, erect (1-1½ feet high); leaves of the stem and lowest pair of floral ones ovate, or oblong-ovate, coarsely and sharply serrate, acute at both ends, or the lowest subcordate, petioled, the floral ones small, lanceolate, entire; raceme simple, few-flowered; pedicels opposite, rather longer than the calyx; corolla large (1¼-1½ inches long) blue, the ample lower lip nearly as long as the curved upper one.—Dry woods and margins of fields in the mountains of Georgia.

Cardia speciosa, Willd. Rough with short appressed scattered hairs; leaves ovate or oval (2-3 inches long), petioled, mostly entire; flowers large (1 inch long), in a terminal compound corymb; calyx cylindrical-bell-shaped, 3-5-toothed, rusty-tomentose, one-half as long as the tube of the 5-8-lobed yellow corolla; stamens 5-8.—Miami (Dr. Garber.) and Jew-fish Key, South Florida. Shrub 5-8 feet high.

Heliotropium Leavenworthii, Torr. (ined?) Rough throughout with short white appressed rigid hairs; stems spreading, sparingly branched (1-2 feet long), very leafy; leaves nearly sessile, lanceolate (4-6 lines long); racemes many-flowered; bracts and calyx-lobes ovate-lanceolate; nutlets 4, hairy; flowers white.—Tampa, (Buckley in Herb. Durand), Sandy beach, Punta Roosa, South Florida. October.

Heliotropium tenellum, Torr. Annual? hoary with appressed white hairs; stem erect, slender, much branched (1 foot high); leaves linear; racemes naked or leafy, remotely few-flowered; calyx unequally 5-parted, the lobes broadly linear; nutlets roundish, pubescent above, reticulate below the middle. West Tennessee, and westward.

Convolvulus Garberi, n. sp. Stem long, shrubby; prostrate, canescent-tomentose; leaves small (6-10 lines long), oblong, obtuse, mucronate, narrowed into a short petiole; peduncles stout, single or by pairs, 1-3-flowered, longer than the leaves; calyx unequal, the 3 outer lobes obovate, twice as long as the 2 roundish inner ones; corolla (9 lines long,) white, sharply 5-lobed; capsule 6-9-valved; stigmas oblong.—Sandy coast at Cape Sable, South Florida (Dr. Garber).

Cuscuta obtusiflora, H. B. K. var. *glandulosa*, Engelm. Stems widely spreading, bright-orange; flowers short-pedicelled, single, or 3-5 in a cluster, glandular; lobes of the calyx and corolla obtuse or rounded; scales ovate, deeply fringed, incurved, slightly exerted; ovary and large capsule depressed; style short and thick.—Ponds near Apalachicola, Florida, mostly on *Polygonum*.

Solanum sisymbriifolium, Lam. Glandular-villous, armed with straight yellow prickles; stem tall (3-5 feet), branching; leaves ovate, petioled, pinnately divided near the base, deeply lobed above the middle; racemes loosely many-flowered; the lower flowers fertile; calyx hispid; corolla 5-cleft; berry globose, nearly included in the dilated calyx.—Waste places, Georgia and Florida.—Leaves 4-9 inches long. Corolla 1 inch wide, pale purple.

Withania Morrisoni, Dunal. Stem erect, branching, closely pubescent; leaves thin, obliquely cordate-oblong, or oval, acuminate, entire, or obscurely wavy, slender petioled; flowers small, 3-6 in a cluster; berry small; fruiting calyx globose; flowers yellow. (*Physalis Carpenteri*, Riddell).—East Feliciana, Louisiana (Prof. Carpenter).

Echites biflora, Jacq. Smooth; stem very long, trailing or twining; leaves oblong-obovate and lanceolate, obtuse or acute, thick, narrowed into a short stout petiole; peduncles stout, 1-3-flowered, as long as the leaves; lobes of the calyx oblong, acute, one-half as long as the pedicel; tube of the large (2-3 inches long) funnel-shaped white corolla, 3-4 times as long as the calyx; follicle fusiform, 3-4 inches long; seeds linear, plumose.—Muddy Islets of the Caloosa River, South Florida. October.

Acerates Feayi, Cham. (ined.) Leaves almost filiform, long, spreading; umbels terminal and sub-terminal, short-peduncled, few-flowered; corolla white, rather large, spreading; leaves of the crown oblong, entire, involute-concave, spreading, as long as the anthers, with a semi-oval, entire crest within (Gray).—Tampa, Florida, (Dr. Feay). This, in conformity with the arrangement of these plants in the "Southern Flora," would be an *Acerates*. Dr. Gray (Proc. Am. Acad. of Arts and Sciences V. xii. p. 72), by amending the characters of *Asclepias* so as to include these cristate species, appropriately refers it to that genus.

Gonolobus flavidulus (*G. hirsutus*, S. Flora). Stem downy and sparsely hairy; leaves ovate, cordate—the sinus open—acute, sparingly pubescent above, downy beneath (3.5 inches long); umbels mostly shorter than the petioles, simple or compound, the pedicels about the length of the flowers, which are ovate and obtuse in the bud; lobes of the corolla oblong, obtuse, finely reticulate, yellowish, smooth within, twice as long as the linear pubescent calyx-lobes; crown 5-crenate, incurved, with 2 erect minute subulate teeth in the sinuses; follicle muricate.—Light clay soil, Gadsden county, Florida. June. The *G. macrophyllus*, Ell., should, I think, be referred to this species.

Gonolobus Baldwinianus, Sweet. Stem and leaves of the preceding; peduncles mostly longer than the petioles; umbels simple or compound, the pedicels mostly longer than the flowers which are oblong-ovate in the bud; lobes of the corolla somewhat spatulate, white, three times as long as the calyx; crown 5-crenate and with a pair of longer subulate lobes in the sinuses.—Calcareous soil, Chattahoochee, Florida, and westward. May and June.

Euphorbia tetrapora, Engelm. Smooth; stem erect, umbellately branched; leaves cuneate, obtuse or emarginate, the uppermost ones roundish, truncate at the base; glands of the involucre 2-horned; capsule smooth; inner face of the seed 4 pitted, the outer face smoothish.—Georgia (Boykin ex Engelmann).

Euphorbia ammannioides, H. B. K. Smooth throughout; stems filiform, very numerous, long (2-3 feet), prostrate, alternately much branched; leaves opposite, oblong, (3.5 lines long), entire, rounded and mucronate at the apex, short petioled; stipules 2-parted; flowers single, terminal, and in the forks of the branches; glands margined with white; capsule obtusely triangular; seeds ovate, obscurely triangular, pale, smooth and even.—Roberts' Key, in Caximbas Bay, South Florida.

Papaya vulgaris, DC. Stem simple (6-15 feet high), leaves roundish, cordate, long-petioled, mostly seven-parted, the divisions broadly sinuate; flowers yellow; the sterile ones salver-shaped, in panicle clusters; the fertile ones larger, bell-shaped, single, or 2-3 together, the long lobes linear-lanceolate; style short; stigmas 5, spreading, fruit pulpy.—South Florida.

Thrinax parviflora, Swartz. Stem smoothish, tall (10-30 feet); leaves fan-shaped, soon smooth; the numerous linear-lanceolate divisions tapering to the slender deeply cleft apex, and united about one-third their length, ligule triangular, acute; spadix smooth paniculate, scarcely shorter than the leaves; flowers very small; drupe white, globose, of the size of a grain of Allspice.—Keys along the Florida Reefs, extending up the west coast as far as Cape Romano.

Thrinax Garberi, n. sp. Stem very short; leaves fan-shaped, on slender roughish petioles, smooth, parted nearly to the base into several strap-shaped slightly cleft divisions; ligule short, rounded; spadix very small (6-8 inches high), spathes (about 4) tubular, dilated upward, oblique, somewhat woolly; flowers very small, divisions of the perianth minute, subulate; stamens 8-10, drupe (immature) pear-shaped. (*Subal minima*, Nutt. ?).—Rocky pine woods near Miami, South Florida, (Dr. Garber.)

Several Epiphytic Orchids and Tillandsias have been detected in South Florida by Dr. Garber and myself, which are omitted in this enumeration.

[To be Concluded.]